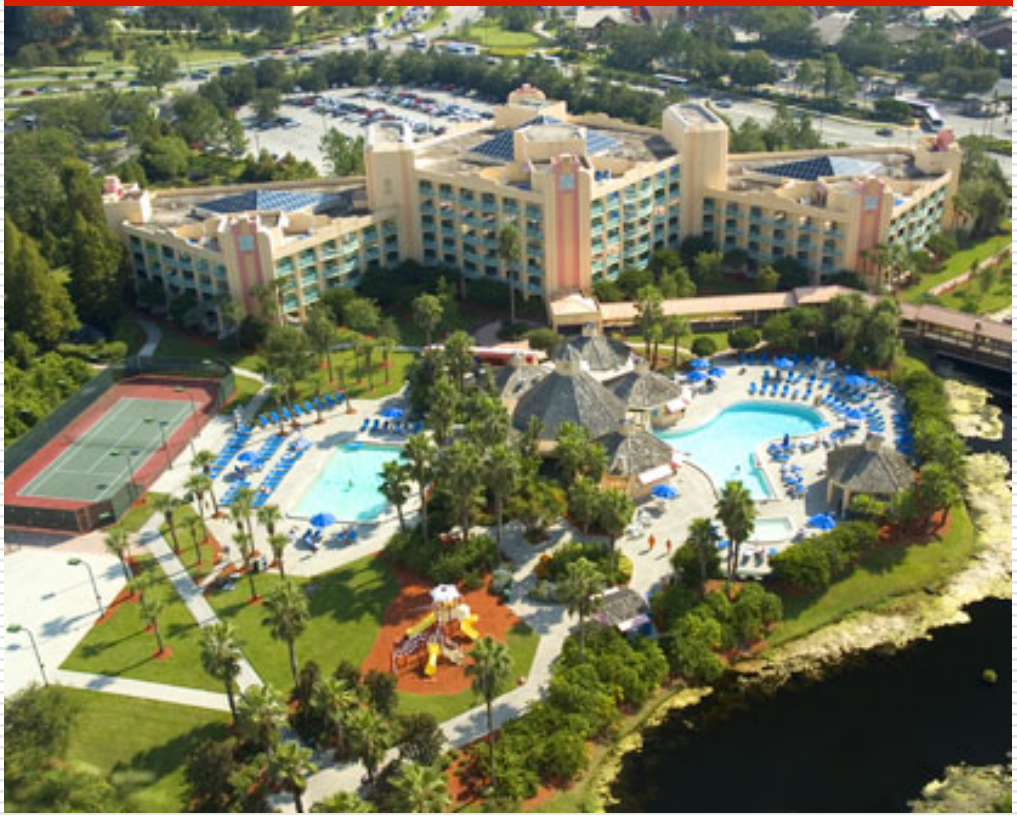
Advanced Pumping Strategies That Work



Children With Diabetes
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Disclosure

- Book sales – all pump companies
- Advisory Boards – Tandem Diabetes, Unomedical, Spring, Halozyme
- Consultant – Bayer, Roche, BD, Abbott, Tandem Diabetes, Medingo, Spring
- Speakers Bureau – Tandem Diabetes
- Sub-Investigator – Glaxo Smith Kline, Animus, Sanofi-Aventis, Bayer, Biodel, Dexcom, Novo Nordisk
- Pump Trainer – Accu-Chek, Animas, Medtronic, Omnipod
- Web Advertising – Sanofi-Aventis, Sooil, Medtronic, Animas, Accu-Chek, Abbott, etc.

What We'll Cover

- APP Study Results
- Importance of the TDD
- Handling Insulin Stacking
- Infusion Set Issues
- How To Stop Spikes
- CGMs for Better Control

Terms

- **TDD** – total daily dose (all basals and boluses) of insulin
- **Basal** –background insulin released slowly through the day
- **Bolus** – a quick release of insulin
  - Carb bolus – covers carbs
  - Correction bolus – lowers high readings
- **Bolus Calculator (BC)** – what calculates bolus recommendations
- **Correction Target** – What BC aims for when high
- **Bolus On Board (BOB)** – bolus insulin still active from recent boluses, active insulin, insulin on board
- **Duration of Insulin Action (DIA)** – how long a bolus will lower the BG – used to measure BOB

Age-Appropriate BG Goals

ADA Age-Appropriate A1c And Meter Goals		
Age	**A1c**	**Approx. Avg. Meter Glucose ***
Less than 6	7.5% to 8.5%	168 to 197 **(180)**
6 to 12	8% or less	183 or less **(170)**
Over 12	7.5% or less	168 or less **(160)**
Over 19	7% or less	154 or less **(150)**
AACE: Over 19	6.5% or less	140 or less **(140)**

Most adults aim for meter avg. of 154 mg/dl or less

* With only premeal BGs, meter average would be lower than these values.

Actual Pump Practices (APP) Study

- Data from 1040 complaint-free Deltec Cozmo insulin pumps downloaded in 2007
- 396 had BG values directly entered from attached CozMonitor Freestyle meter
  - Divided into thirds by average glucose
- Basal % and CarbF and CorrF formulas derived from the third that had the best control

APP Study – BG, Basal & Carb Results

Insulin Use				
Group:	All 396 Pumps	Low Third	Mid Third	High Third
Avg. Meter BG	184 mg/10.2 mmol	144 mg/dl (8.0)	181 mg/dl (10.0)	227mg/dl (12.6)
BG Tests/Day	4.38	4.73	4.41	4.01
TDD	49.4	47.9	49.1	51.1
Basal %	47.6%	47.6%	47.2%	47.8%
CarbBolus/Day	4.14	4.07	4.20	4.14
CarbGram/Day	189.9	185.2	196.3	187.9
CarbF	11.4	10.8	12.2	11.2

APP Study – Correction Results

Correction Doses				
Group:	All 396 Pumps	Low Third	Mid Third	High Third
Avg. Meter BG	184 mg/10.2 mmol	144 mg/dl (8.0)	181 mg/dl (10.0)	227mg/dl (12.6)
CorrBoluses/d	2.12	1.92	2.10	2.35
CorrBolus U/d	5.59 u	4.18 u	5.57 u	7.03 u
CorrBolus %	11.6%	9.0%	11.6%	14.2%
CorrF x TDD	2160	1960	2360	2330

APP Study –
Insulin Doses Used By Successful Pumpers

2. Optimal Insulin Use
Mean Values For Optimal Doses In Best Control Tertile

Insulin Source	% of TDD	Interquartile Range (%)
Basal	47.8%	39.6% to 54.9%
Carb Boluses	43.1%	35.6% to 51.2%
Corr Boluses	9.0%	6.2% to 11.3%

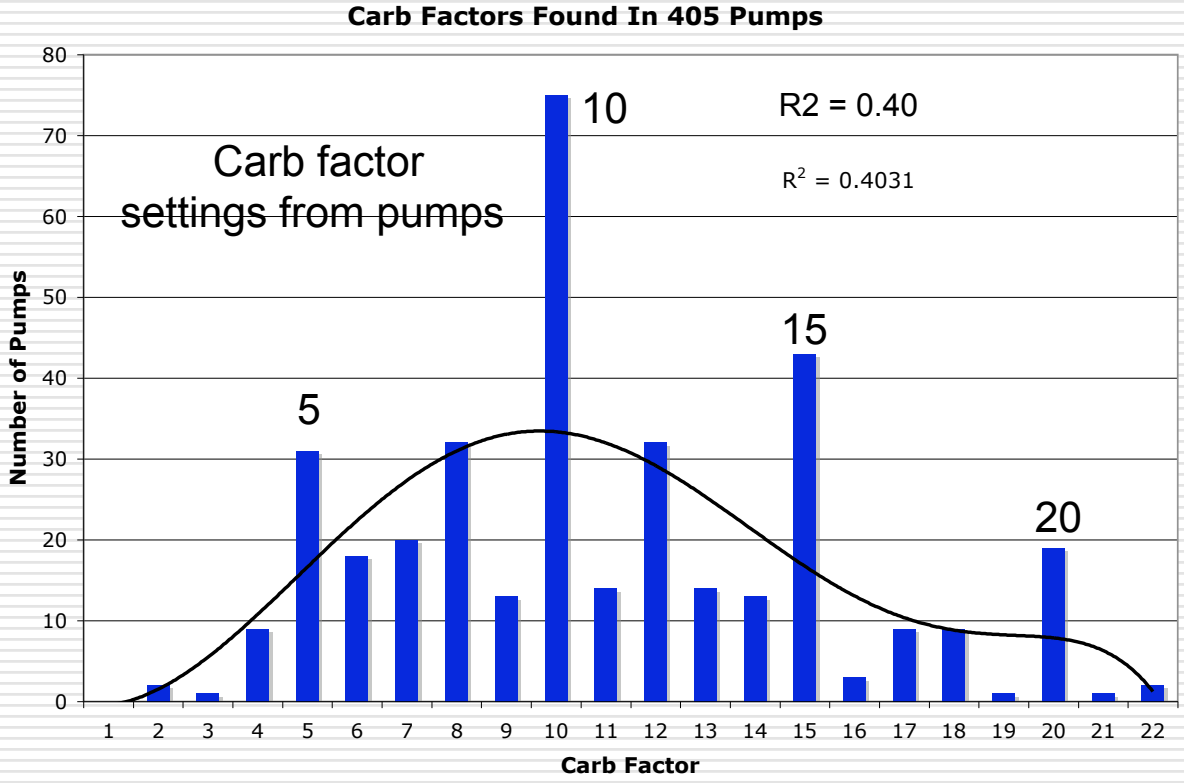
CorrF Rule Number* = 1960 mg/dl per unit (IQR = 1413 to 2151)

* CorrF Rule Number = Avg CorrF x Avg TDD

Insulin use from best control third (132 of 396 pumps) in APP Study

J Walsh, R Roberts, T Bailey: J Diab Science & Technology 2010, Vol 4, #5, Sept 2010

APP Study – CarbF Settings In Pumps[1,2]



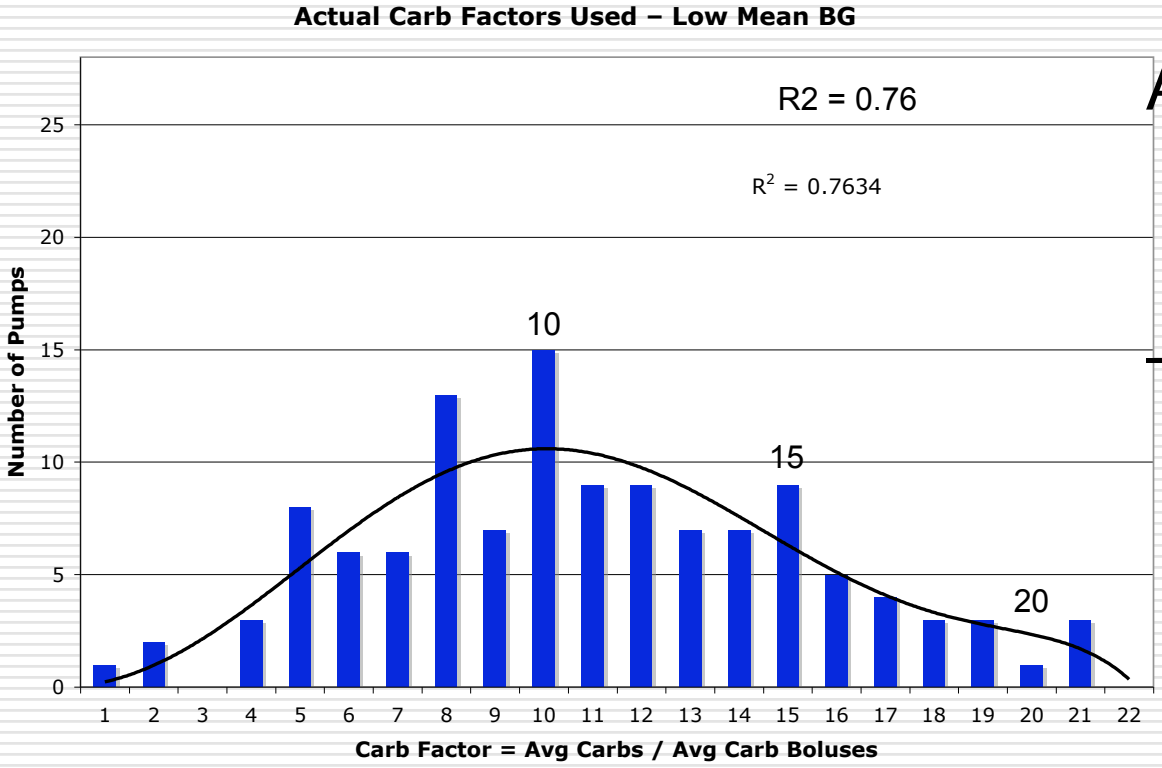
Carb factor settings in pumps were not evenly distributed.

"Magic" numbers – 5, 10, 15, and 20 g/unit – were preferred.

Use formulas to calculate basal/bolus settings –> much better than WAG!

1. J Walsh, R Roberts, T Bailey: J Diab Science & Technology 2010, Vol 4, #5, Sept 2010
2. J. Walsh, D. Wroblewski, and TS Bailey: Insulin Pump Settings – A Major Source For Insulin Dose Errors, Diabetes Technology Meeting 2007

APP Study – CarbFs Actually Used[1]



Carb Factors actually used in best control tertile – avg carbs/avg carb bolus per day

- Actual CarbFs improve from pump CarbF settings
  - 85% of improvement comes when Cozmo BC reduces carb doses for BOB and hypoglycemia

1 J. Walsh, D. Wroblewski, and TS Bailey: Insulin Pump Settings – A Major Source For Insulin Dose Errors, Diabetes Technology Meeting 2007

APP Study Revelations

- Don’t use “magic” numbers – base starting settings on formulas
- Carb counts, number of carb boluses/day, number of BG tests/day, on average, have no or minimal impact on average glucose
- TDD and pump settings have greatest impact on avg. BG
- Most pumpers need a higher TDD

To Set Up Your Pump BC Correctly

Your doctor will determine:

- An accurate TDD (MAJOR factor)
- Accurate basals (~50% of TDD)
- An accurate CarbF
- An accurate CorrF
- An accurate DIA (from research studies)

Dosing For Success

1. Stop lows first
2. Find your iTDD – for normal, stable BGs
3. Set & test basals – keeps overnight readings level
4. Set & test CarbF – fine-tune premeal BGs
5. Lower post meal BGs – bolus early, low GI foods, Symlin, etc.
6. Set & test CorrF – to bring highs down safely

Enjoy good control or return to #1

Brittle diabetes or frequent highs = wrong settings (usually)

Find An iTDD* To Correct Glucose Problems

* improved Total Daily Dose of insulin

Your TDD

- Controls the average glucose
  - 1% rise in TDD = 4 mg/dl drop in avg. glucose
- Makes it easy to find accurate basal rates, CarbF, and CorrF
- The correct TDD and pump settings lead to lower and more stable BGs

Use pattern management to fine tune doses & settings

Pump Setting Formulas[1]

Basal = ~ 48% of TDD

CarbF = 2.6 x $\frac{\text{Wt(lbs)}}{\text{TDD}}$

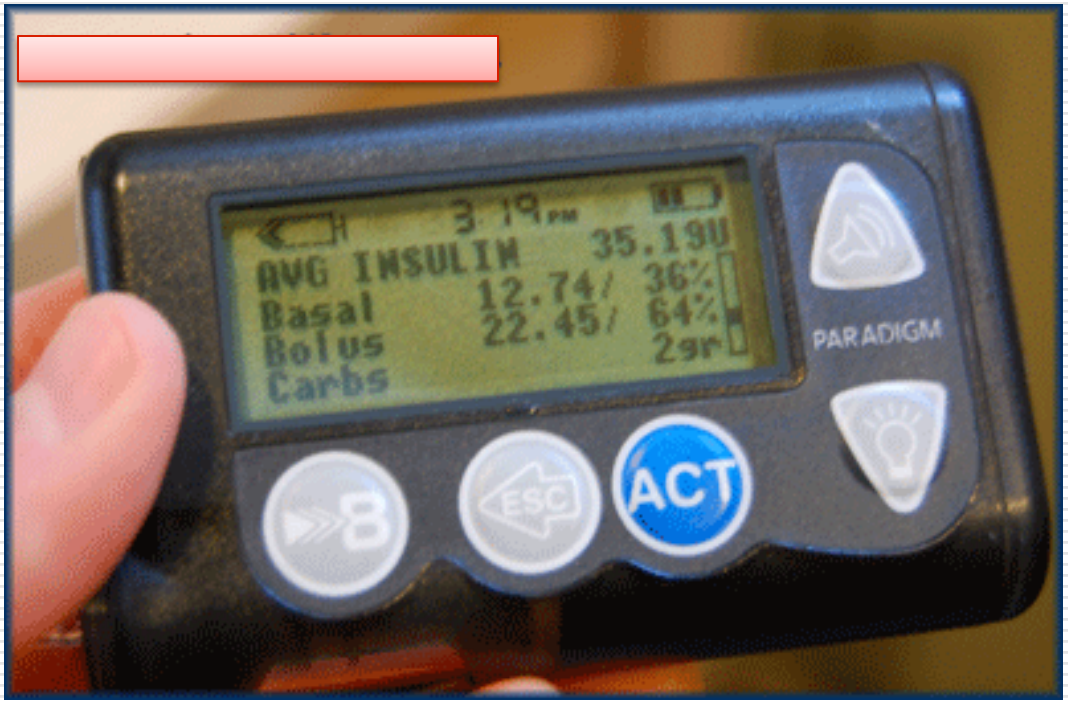
Carb factor is directly related to insulin sensitivity = an average CarbF times an individual's own insulin sensitivity

Corr. Factor = 1960 / TDD

Correction factor is inversely related to TDD and also inversely related to avg. BG

[1]J Walsh, R Roberts, T Bailey: J Diab Science & Technology 2010, Vol 4, #5, Sept 2010

Find Your TDD



TDD = 35.19 u

Low basal at 36%

2 gr of carb/day means Bolus Wizard is not used

Use a 10 to 30 day average to analyze

Check Current Pump Settings

3. Estimates of Basal, CarbF, and CorrF Basal on TDD and Wt

TDD	Basal [1] u/day	Basal u/hr	CorrF[2] (mg/dl) / u	Carb Factor[3] in grams/u								
				100 lbs 45.4 kg	110 lbs 49.9 kg	120 lbs 54.4 kg	130 lbs 60.0 kg	140 lbs 63.5 kg	150 lbs 68.0 kg	160 lbs 72.6 kg	170 lbs 77.1 kg	180 lbs 81.6 kg
16	7.7	0.32	122	16.3	17.9	19.5	21.1	22.8				
20	9.6	0.40	98.0	13.0	14.3	15.6	16.9	18.2	19.5	20.8		
24	11.5	0.48	81.7	10.8	11.9	13.0	14.1	15.2	16.3	17.3	19.5	21.7
28	13.4	0.56	70.0	9.3	10.2	11.1	12.1	13.0	13.9	14.9	16.7	18.6
32	15.4	0.64	61.3	8.1	8.9	9.8	10.6	11.4	12.2	13.0	14.6	16.3
36	17.3	0.72	54.4	7.2	7.9	8.7	9.4	10.1	10.8	11.6	13.0	14.4
40	19.2	0.80	49.0	6.5	7.2	7.8	8.5	9.1	9.8	10.4	11.7	13.0
45	21.6	0.90	43.6	5.8	6.4	6.9	7.5	8.1	8.7	9.2	10.4	11.6
50	24.0	1.00	39.2	5.2	5.7	6.2	6.8	7.3	7.8	8.3	9.4	10.4
55	26.4	1.10	35.6	4.7	5.2	5.7	6.1	6.6	7.1	7.6	8.5	9.5
60	28.8	1.20	32.7	4.3	4.8	5.2	5.6	6.1	6.5	6.9	7.8	8.7
65	31.2	1.30	30.2	4.0	4.4	4.8	5.2	5.6	6.0	6.4	7.2	8.0
70	33.6	1.40	28.0	3.7	4.1	4.5	4.8	5.2	5.6	5.9	6.7	7.4
80	38.4	1.60	24.5	3.3	3.6	3.9	4.2	4.6	4.9	5.2	5.9	6.5
90	43.2	1.80	21.8	2.9	3.2	3.5	3.8	4.0	4.3	4.6	5.2	5.8
100	48.0	2.00	19.6	2.6	2.9	3.1	3.4	3.6	3.9	4.2	4.7	5.2

[1] Basal = TDD x 0.48 [2] Correction Factor = 1960/TDD [3] Carb Factor = 10.8 x relative insulin sensitivity = (2.6 x Wt (lb))/TDD

For exact calculations, use the Pump Setting Tool at opensourcediabetes.org

J Walsh and R Roberts: Pumping Insulin (5th ed), 2011

Find Your iTDD

If current BGs are not great:

1. Lower your current TDD by about 5% for:
   - Frequent lows
   - Or highs AND lows IF lows come first
2. Raise the TDD, using the iTDD Table on next slide to adjust for high A1c or high meter average
   - Increase TDD by 1% for each 4 mg/dl drop desired in avg BG
3. This is your improved TDD (iTDD)

Keep basal and carb bolus totals balanced

Avg BG on pumps is 183.9 mg/dl (10.2 mmol) – most need larger TDD.

The iTDD Table For High Avg. BGs

10.6 Find Your True TDD

This table helps you find a more accurate TDD when your readings are often above 140 mg/dl (mmol) AND you are not having frequent or severe lows.

Simply find a current 14 day average TDD from your pump on the left and an average glucose from your meter (or a recent A1c) on the bottom. When they intersect provides a better estimate for your TDD.

Current TDD									
100 u	103.0	105.8	108.6	111.4	114.4	117.2	120.0	123.0	125.8
95 u	97.9	100.5	103.2	105.8	108.7	111.3	114.0	116.9	119.5
90 u	92.7	95.2	97.7	100.3	103.0	105.5	108.0	110.7	113.2
85 u	87.6	89.9	92.3	94.7	97.2	99.6	102.0	104.6	106.9
80 u	82.4	84.6	86.9	89.1	91.5	93.8	96.0	98.4	100.6
75 u	77.3	79.4	81.5	83.6	85.8	87.9	90.0	92.3	94.4
70 u	72.1	74.1	76.0	78.0	80.1	82.0	84.0	86.1	88.1
65 u	67.0	68.8	70.6	72.4	74.4	76.2	78.0	80.0	81.8
60 u	61.8	63.5	65.2	66.8	68.6	70.3	72.0	73.8	75.5
55 u	56.7	58.2	59.7	61.3	62.9	64.5	66.0	67.7	69.2
50 u	51.5	52.9	54.3	55.7	57.2	58.6	60.0	61.5	62.9
45 u	46.4	47.6	48.9	50.1	51.5	52.7	54.0	55.4	56.6
35 u	41.2	42.3	43.4	44.6	45.8	46.9	48.0	49.2	50.3
30 u	36.1	37.0	38.0	39.0	40.0	41.0	42.0	43.1	44.0
25 u	30.9	31.7	32.6	33.4	34.3	35.2	36.0	36.9	37.7
20 u	25.8	26.5	27.2	27.9	28.6	29.3	30.0	30.8	31.5
15 u	20.6	21.2	21.7	22.3	22.9	23.4	24.0	24.6	25.2
A1c:	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0
14 day avg BG:	155.0	169.0	183.0	197.0	212.0	226.0	240.0	255.0	269.0

If frequent highs are main problem, use table to increase current avg. TDD from recent A1c or a 14 day BG average

J Walsh and R Roberts:
Pumping Insulin (5th ed), 2011

Check Current Pump Settings

3. Estimates of Basal, CarbF, and CorrF Basal on TDD and Wt

TDD	Basal [1] u/day	Basal u/hr	CorrF[2] (mg/dl) / u	Carb Factor[3] in grams/u								
				100 lbs 45.4 kg	110 lbs 49.9 kg	120 lbs 54.4 kg	130 lbs 60.0 kg	140 lbs 63.5 kg	150 lbs 68.0 kg	160 lbs 72.6 kg	170 lbs 77.1 kg	180 lbs 81.6 kg
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20	9.6	0.40	98.0	13.0	14.3	15.6	16.9	18.2	19.5	20.8		
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45	21.6	0.90	43.6	5.8	6.4	6.9	7.5	8.1	8.7	9.2	10.4	11.6
50	24.0	1.00	39.2	5.2	5.7	6.2	6.8	7.3	7.8	8.3	9.4	10.4
55	26.4	1.10	35.6	4.7	5.2	5.7	6.1	6.6	7.1	7.6	8.5	9.5
60	28.8	1.20	32.7	4.3	4.8	5.2	5.6	6.1	6.5	6.9	7.8	8.7
65	31.2	1.30	30.2	4.0	4.4	4.8	5.2	5.6	6.0	6.4	7.2	8.0
70	33.6	1.40	28.0	3.7	4.1	4.5	4.8	5.2	5.6	5.9	6.7	7.4
80	38.4	1.60	24.5	3.3	3.6	3.9	4.2	4.6	4.9	5.2	5.9	6.5
90	43.2	1.80	21.8	2.9	3.2	3.5	3.8	4.0	4.3	4.6	5.2	5.8
100	48.0	2.00	19.6	2.6	2.9	3.1	3.4	3.6	3.9	4.2	4.7	5.2

[1] Basal = TDD x 0.48 [2] Correction Factor = 1960/TDD [3] Carb Factor = 10.8 x relative insulin sensitivity = (2.6 x Wt (lb))/TDD

For exact calculations, use the Pump Setting Tool at opensourcediabetes.org

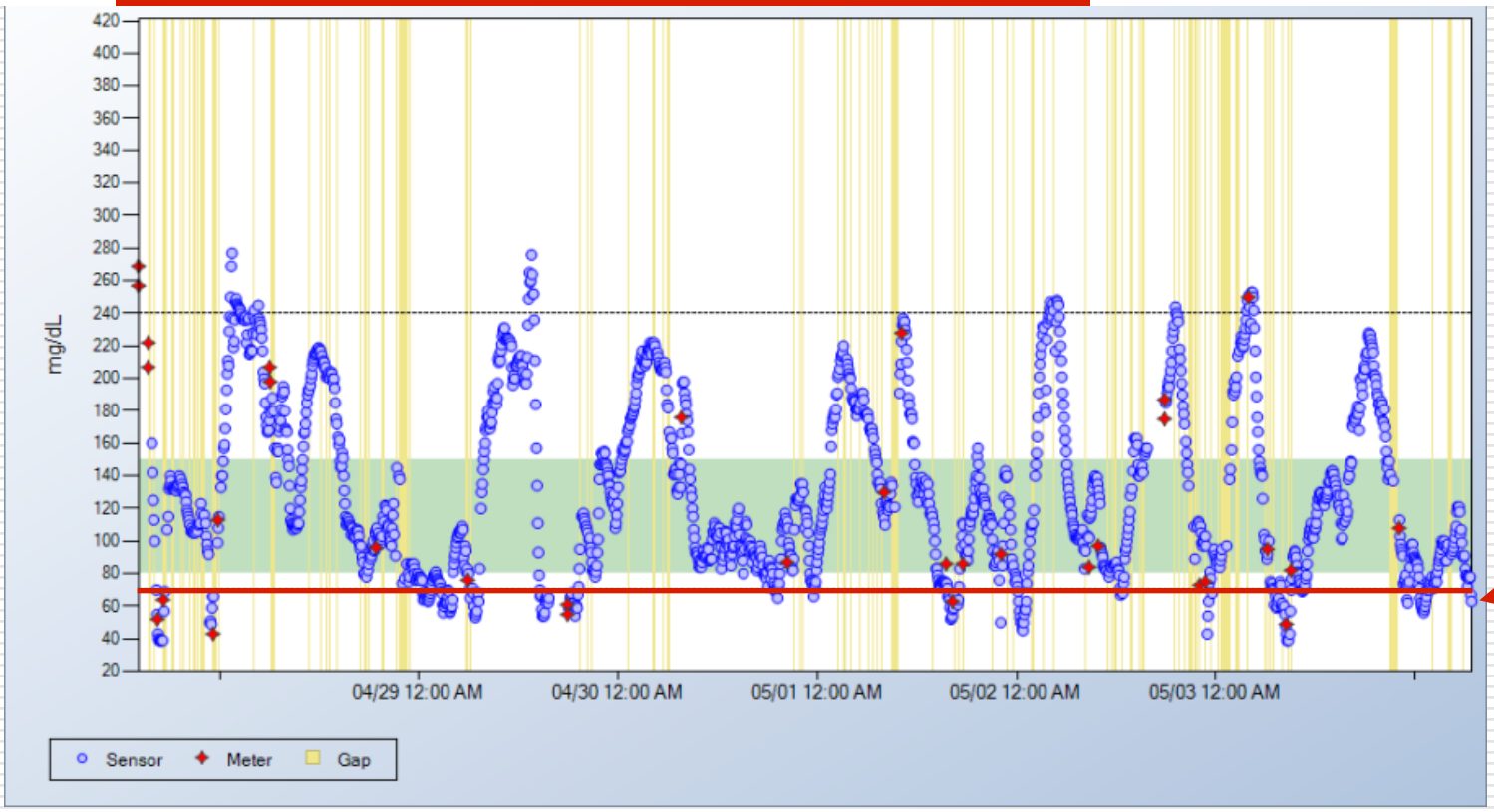
J Walsh and R Roberts: Pumping Insulin (5th ed), 2011

Change The TDD For

- Frequent lows or frequent highs
- Going on or off a diet
- Loss or gain of weight
- Seasonal changes
- Change in activity or sports
- Vacation
- Growth spurts
- Puberty and menses

Do not wait until your next clinic visit!

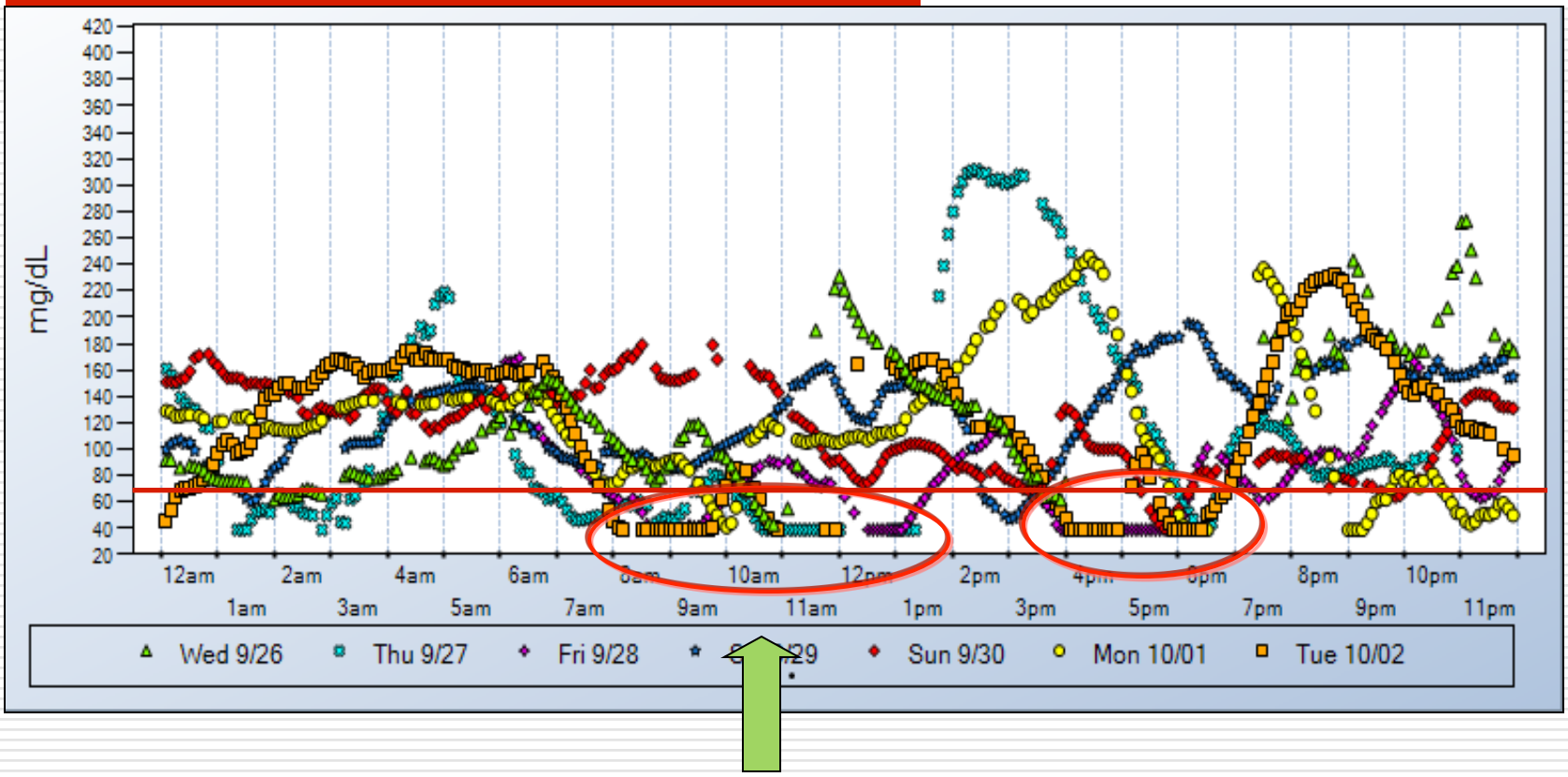
Frequent Lows = Excess TDD



Excess TDD – ~2 Lows to Highs/day

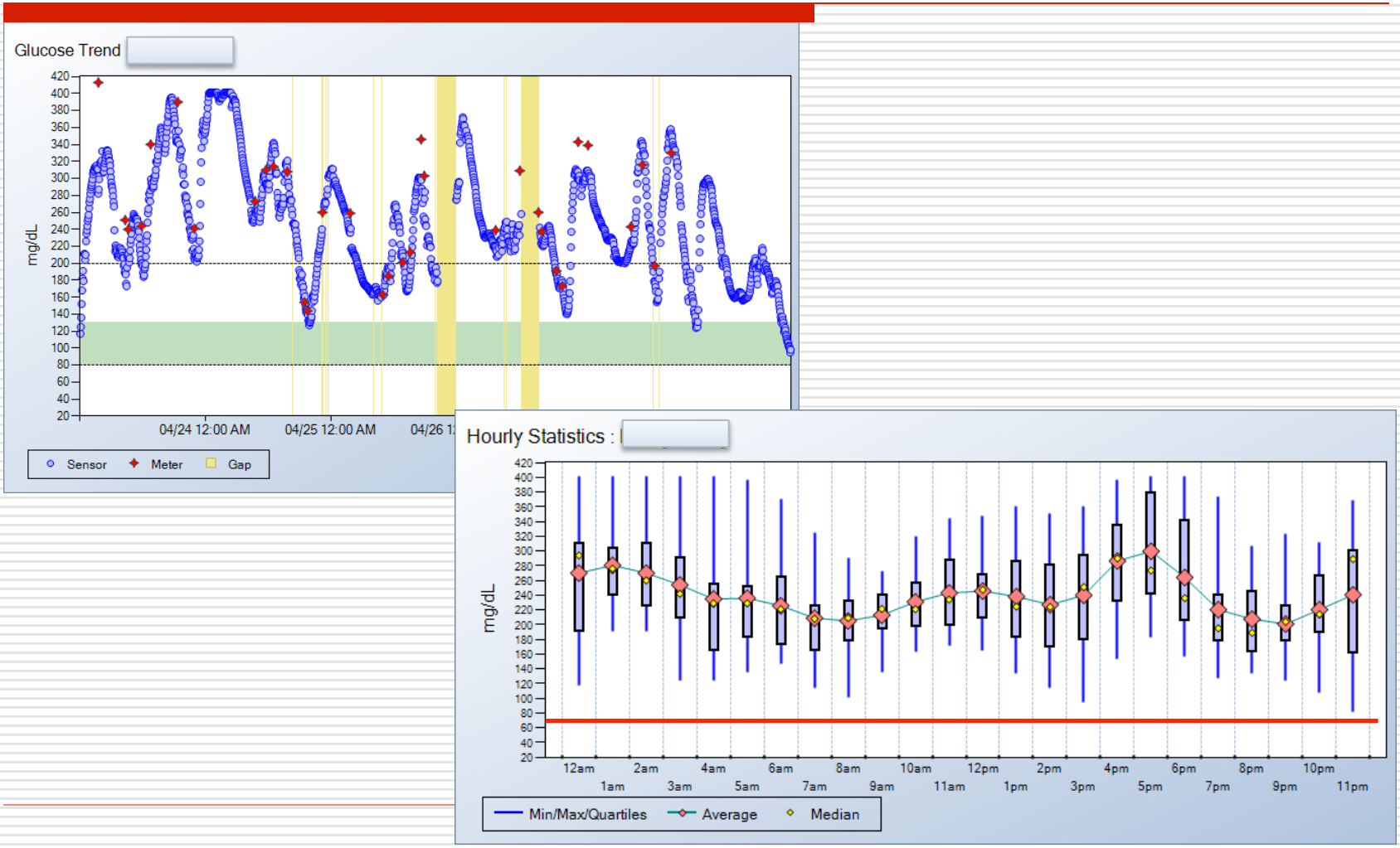
70 mg/dl (3.9 mmol)

Frequent Lows

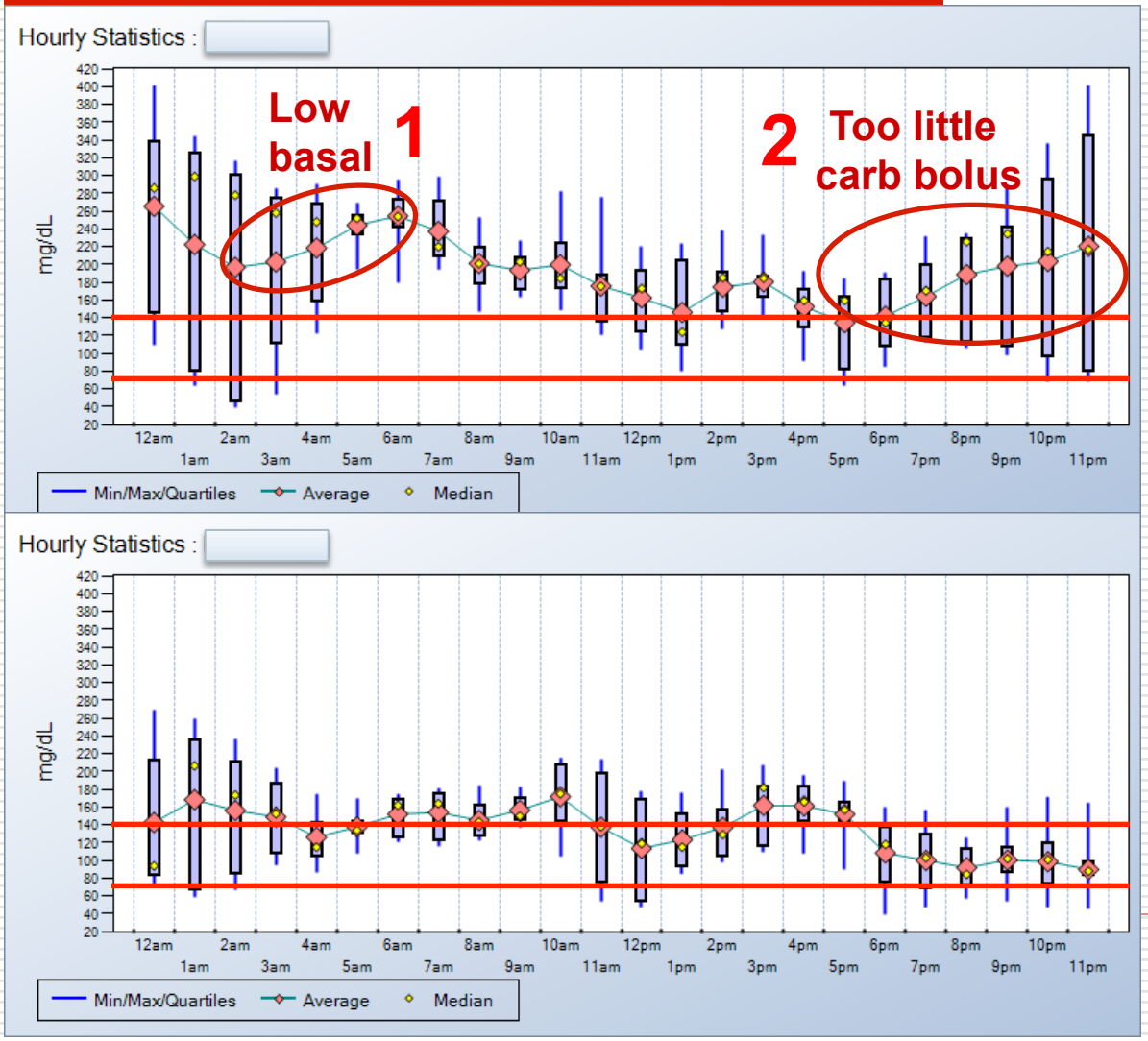


Lower the TDD and derive new basal rates, CarbF and CorrF from it.

Frequent Highs = A Low TDD



TDD Before & After Adjustment

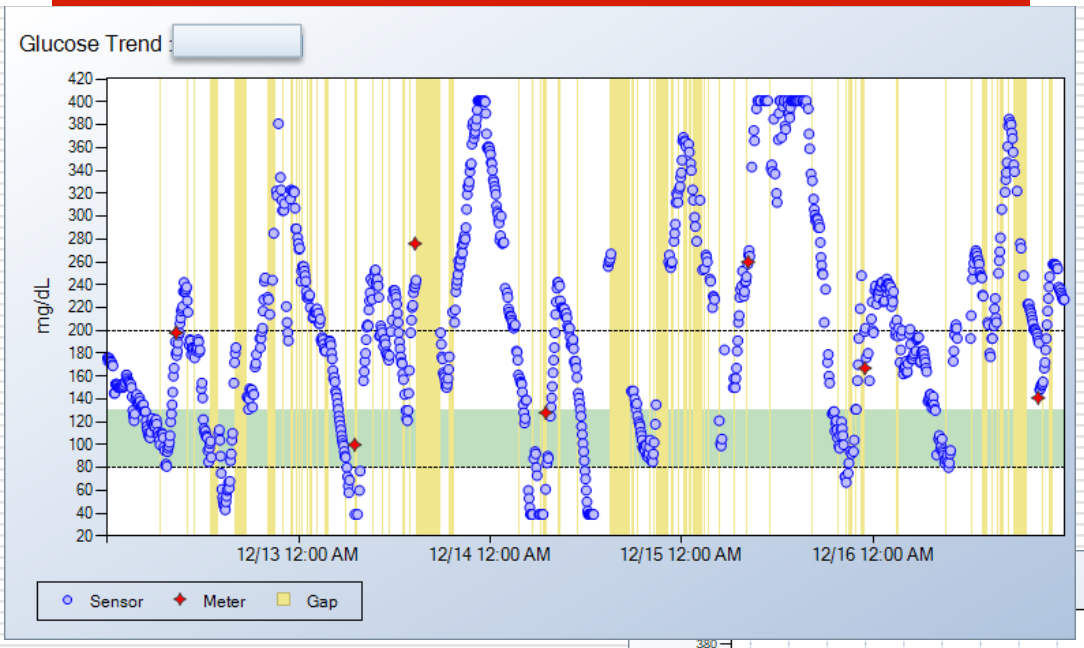


Start TDD = 36 u

1. Raised basal by 0.05 u/hr all day (+1.2 u/day)
2. Lowered carb factor from 1u/13g to 1u/12g (+1.8 u/day)

End TDD = 39 u

Highs And Lows – With A Pattern

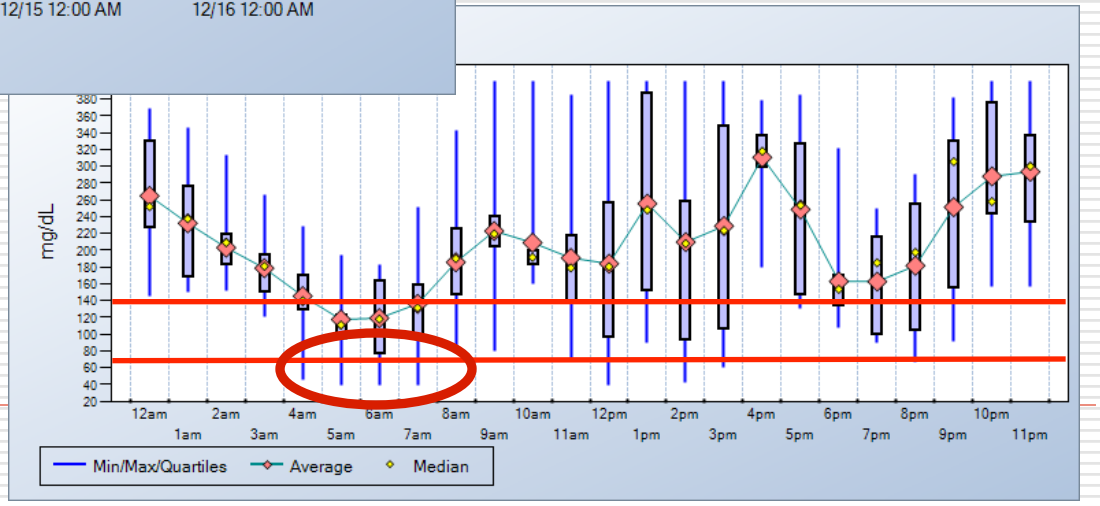


5 day average:

Avg BG: 203.4 (11.3)

Range: 39 to 401 (2.2 to 22.3)

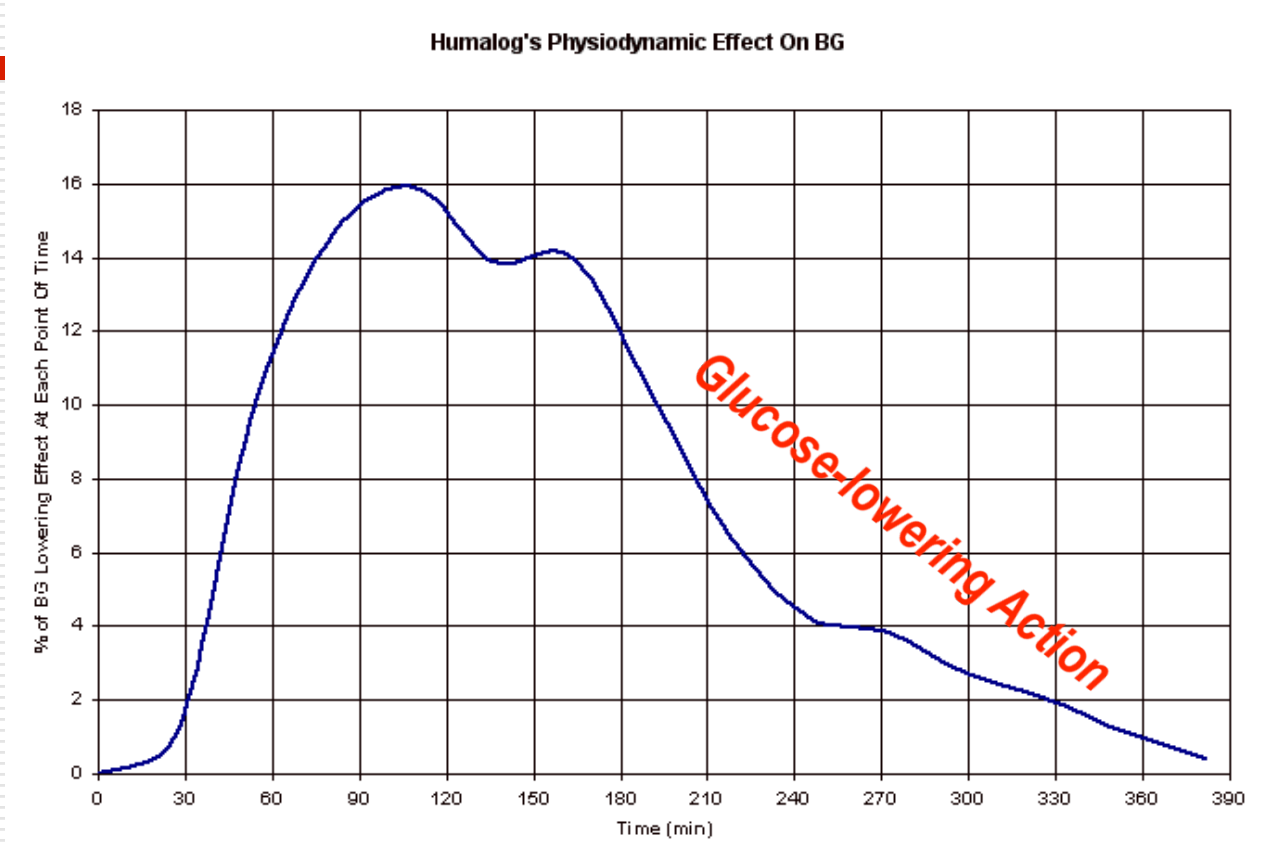
SD: 89.9



Insulin Stacking

- Happens anytime two or more boluses overlap
- Measured in pump as bolus on board (BOB, IOB, active insulin)
- Used in new bolus calculation once a BG value is entered
- Impact of a bolus can't be measured accurately against BG value until 90 to 120 minutes after it was given
- The safest way to minimize insulin stacking is to subtract BOB from correction bolus first, then from a carb bolus if there is BOB remaining

Duration Of Insulin Action (DIA)



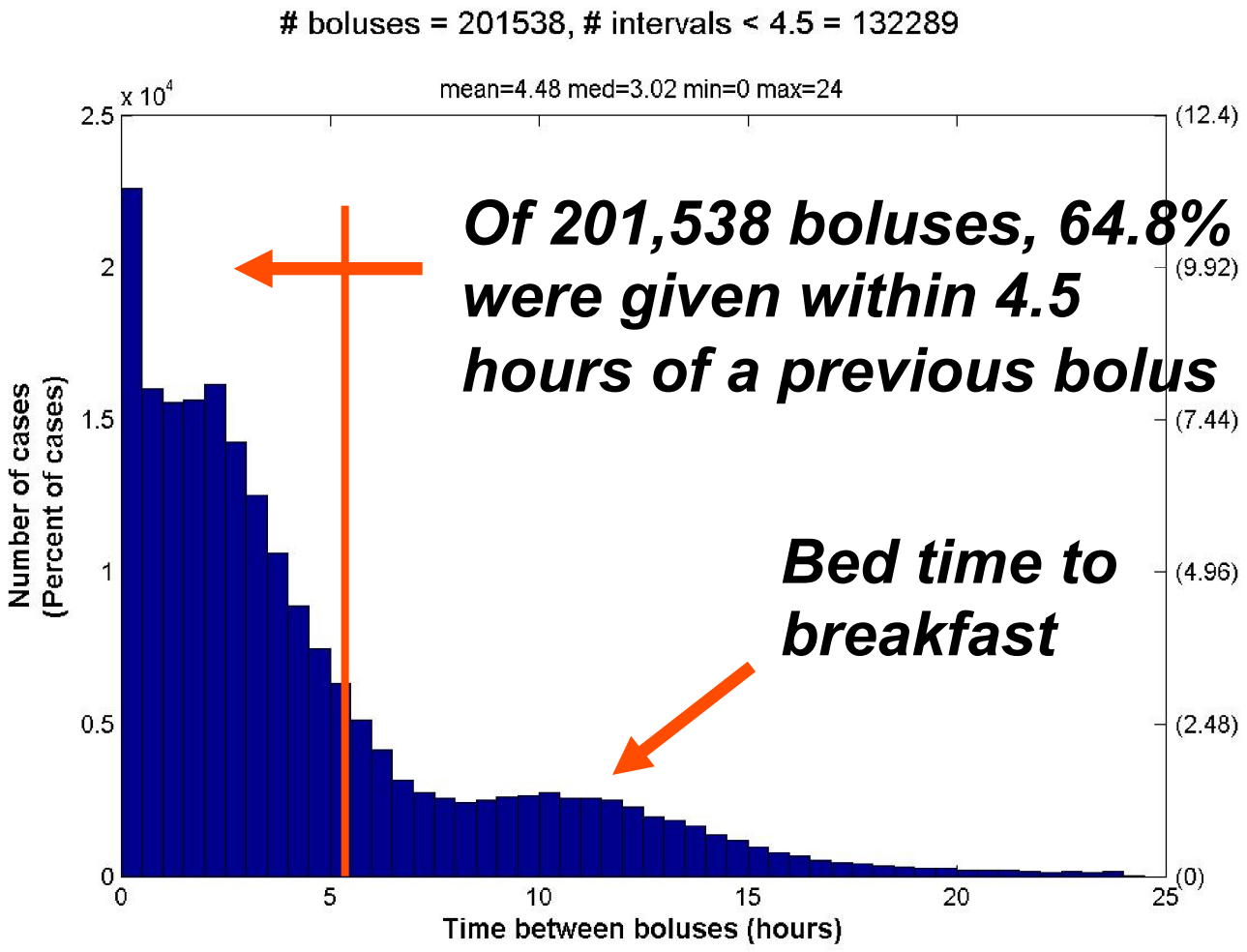
Rapid insulin lowers the glucose for 4.5 to 6.5 hrs. This is physiologic – it DOES NOT CHANGE in the body when you change the DIA setting in your pump!

BOB For Different DIAs In Pump

BOB Remaining After A 10 unit Bolus (Curvilinear)					
With this DIA	BOB that your pump thinks is left after:				
	1 hr	2 hr	3 hr	4 hr	5 hr
3.0 hrs	7.0 u	2.6 u	0 u	0 u	0 u
4.0 hrs	8.2 u	4.7 u	1.8 u	0 u	0 u
4.5 hrs	8.7 u	5.5 u	2.6 u	1.0 u	0 u
5.0 hrs	9 u	6.5 u	3.6 u	1.5 u	0 u

A short DIA causes hidden insulin stacking!

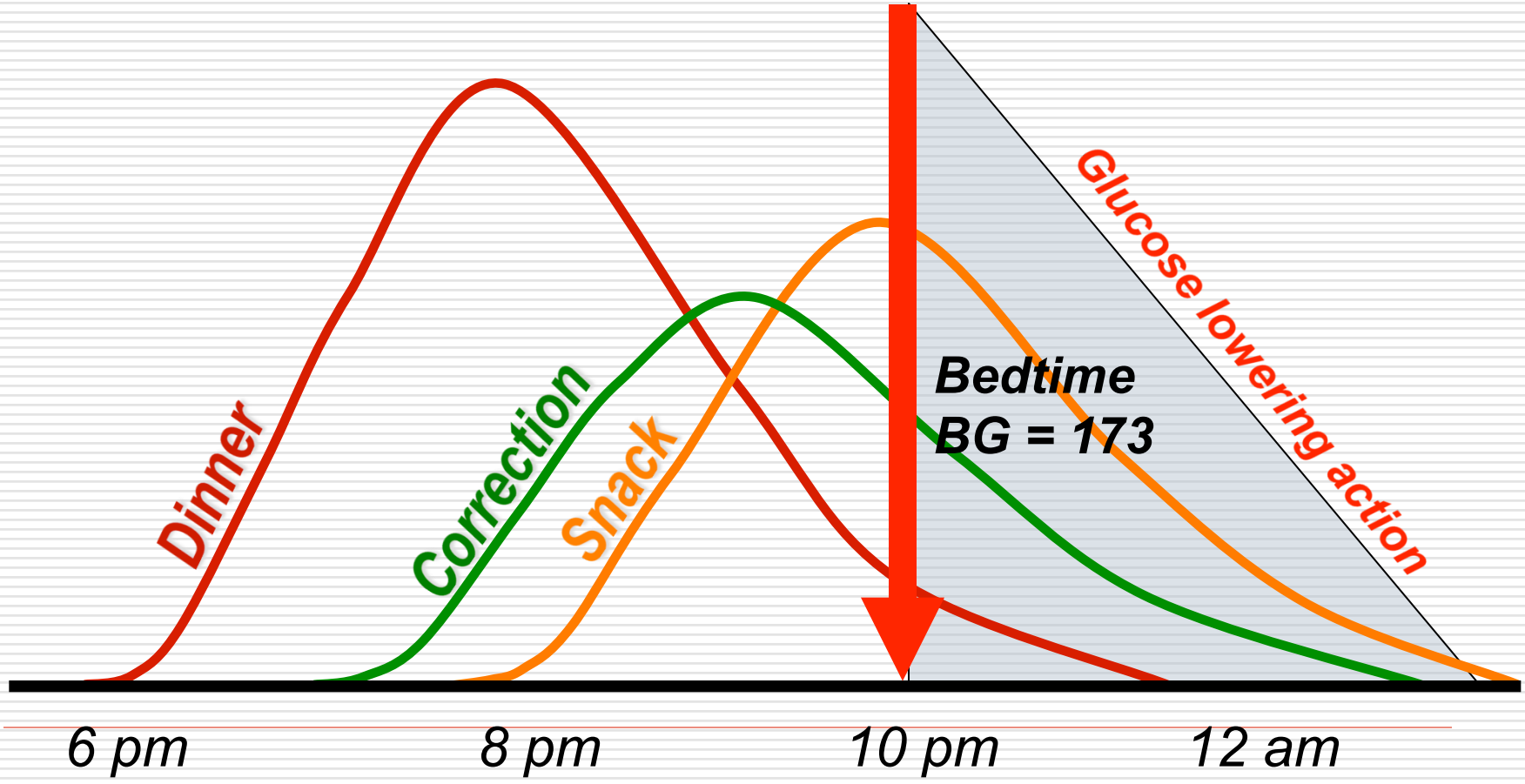
Insulin Stacking Is Common



Disparate Bolus on Board Recommendations in Insulin Pump Therapy by J Walsh, D Wroblewski, T Bailey. Poster 2007 AACE Meeting

Insulin Stacking

Bedtime BG = 173 mg/dl – is there an insulin or a carb deficit?



What Would You Do?

Your child has a bedtime glucose of 121 and wants a 50 gram snack, but she has 5 units of BOB.

CarbF = 10 g/u, CorrF = 50 mg/dl, Target = 120 mg/dl

Would you:

A. Cover her bedtime carbs with a full bolus?

B. Cover part of these carbs?

C. Let her eat these carb without a carb bolus?

No Two Pump BCs Give Same Bolus Recommendations

Pumps Give Different Bolus Recommendations					
	Glucose	Actual Need	Pump A	Pump B	Pump C
CarbF = 10	119 mg/dl	0 u	0 u	5 u	5 u
CorrF = 50	121 mg/dl	0 u	5 u	5 u	5 u
Target = 100	200 mg/dl	2 u	5 u	5 u	7 u
DIA = 5 hrs	300 mg/dl	4 u	5 u	5 u	9 u

Pumper wants to eat 50 gram dessert 4 nights in a row 2 hrs after dinner when she has 5 u of BOB left from carb boluses. Her BG at this time is shown with the bolus recommendations given by different pumps.

First 2 nights she played tennis after dinner, not on 3rd, stress on 4th.

Use Bolus Overrides When Needed

- Your pump doesn't know everything – change bolus recommendations when the situation demands
- Dr. Irl Hirsch suggests that about 25% of all bolus recommendations will be changed when the user knows what they're doing
- A CGM's trend arrows really helps decide

Calculate A Bolus Yourself

1. Add Carb and Correction Boluses together
2. Subtract BOB
3. Get an accurate bolus!

Examples:

1. Carb bolus = 3 u, corr bolus = 1 u, BOB = 4 u
   3 + 1 = 4 4 – 4 = 0 u No bolus needed
2. Carb bolus = 2 u, corr bolus = 1 u, BOB = 4 u
   2 + 1 = 3 3 – 4 = –1 u More carbs are needed

Use A Single Correction Target

Where In Correction Target Range Does The Pump Aim?	
Pump A	**Middle**
Pump B	**Top and Bottom**
Pump C	**Middle**

*BGs inside correction target range ARE NOT CORRECTED.**

Best to use a narrow correction target range, such as 100 to 120 mg/dl or a single correction target, such as 110 mg/dl.

** For range 70 to 180, BGs of 71 or 179 are not adjusted for.*

Calculate Carbs Needed For Low

1. Give 10 grams (child) to 15 grams (adolescent or adult) for low
2. And add BOB x CarbF (to offset BOB)
3. To get carbs needed! (+ a FEW extra for safety)

Example: 6 yo with low BG, BOB = 1.6 u, CarbF = 10 g, no extra activity:

10 g + (1.6 x 10) = 10 + 16 = 26 grams for low

Stops most lows to highs!

Have Infusion Set Problems?

- Do sites often “go bad”?
- Having two or more “unexplained” highs in a row?
- Do highs correct only after you change the infusion set?
- Happen more than once a year?

Yes?

- Anchor the infusion line with tape
- Review site prep technique
- Switch to a different brand of infusion set

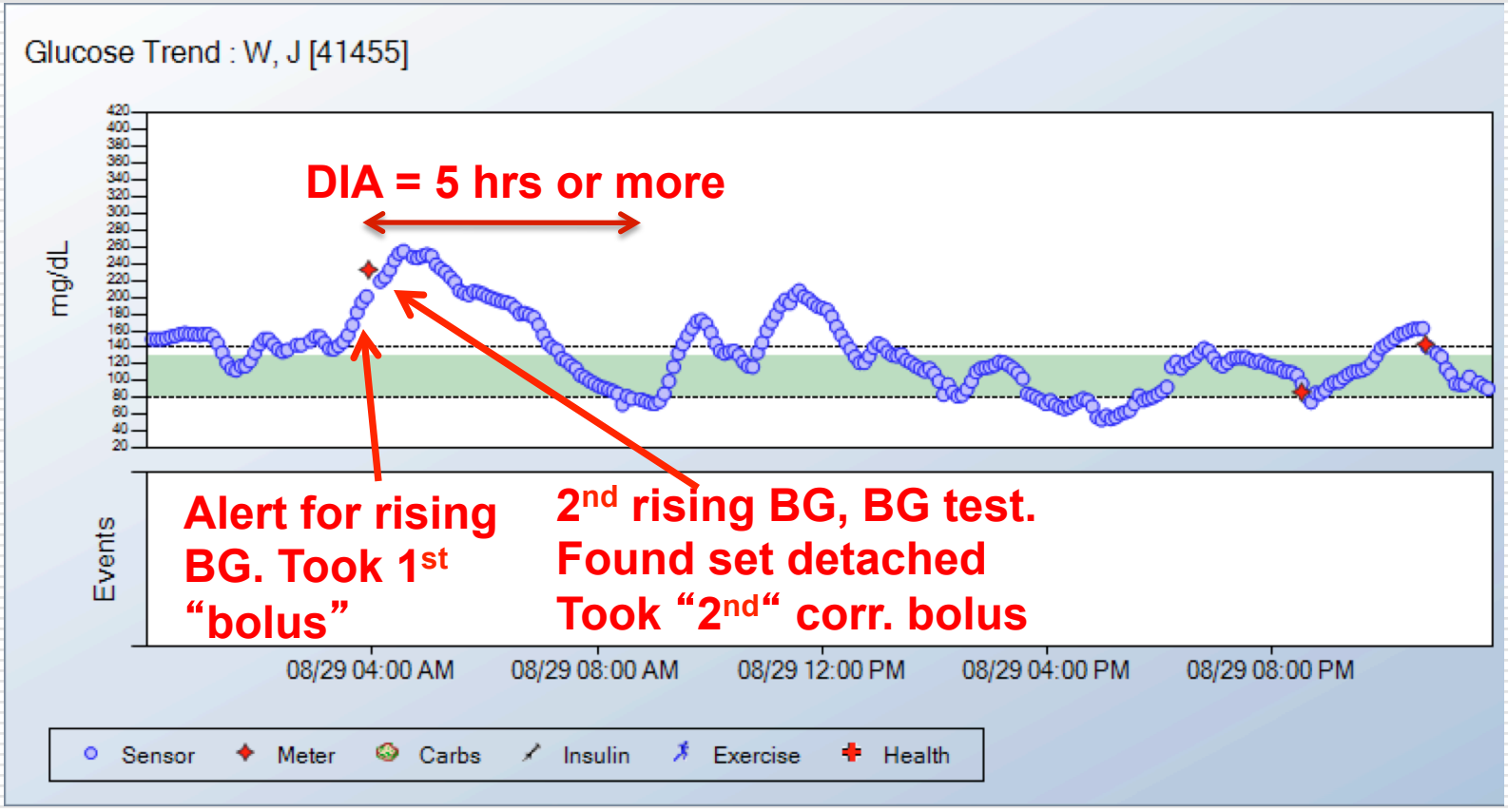
Infusion Set/Patch Pump Can Go Bad

- Leaking from site (or hub)
- Not taping down the infusion line (tugging)
- Auto-inserters –> bent or kinked Teflon
- Detachment
- Bleeding (hematoma)
- Clogging, blockage, occlusion
  - High readings seen for several hours before occlusion alarm occurs

APP – Occlusions Worsen Control

BG Tertile	Low	Middle	High
Avg BG	146.6	181.6	229.3
BGs/day	4.74	4.52	4.22
Blocks/ month	1.36	3.04	3.57

Infusion Set Failure On CGM



Occlusions / Blockages

Should not happen!

More than once a month?

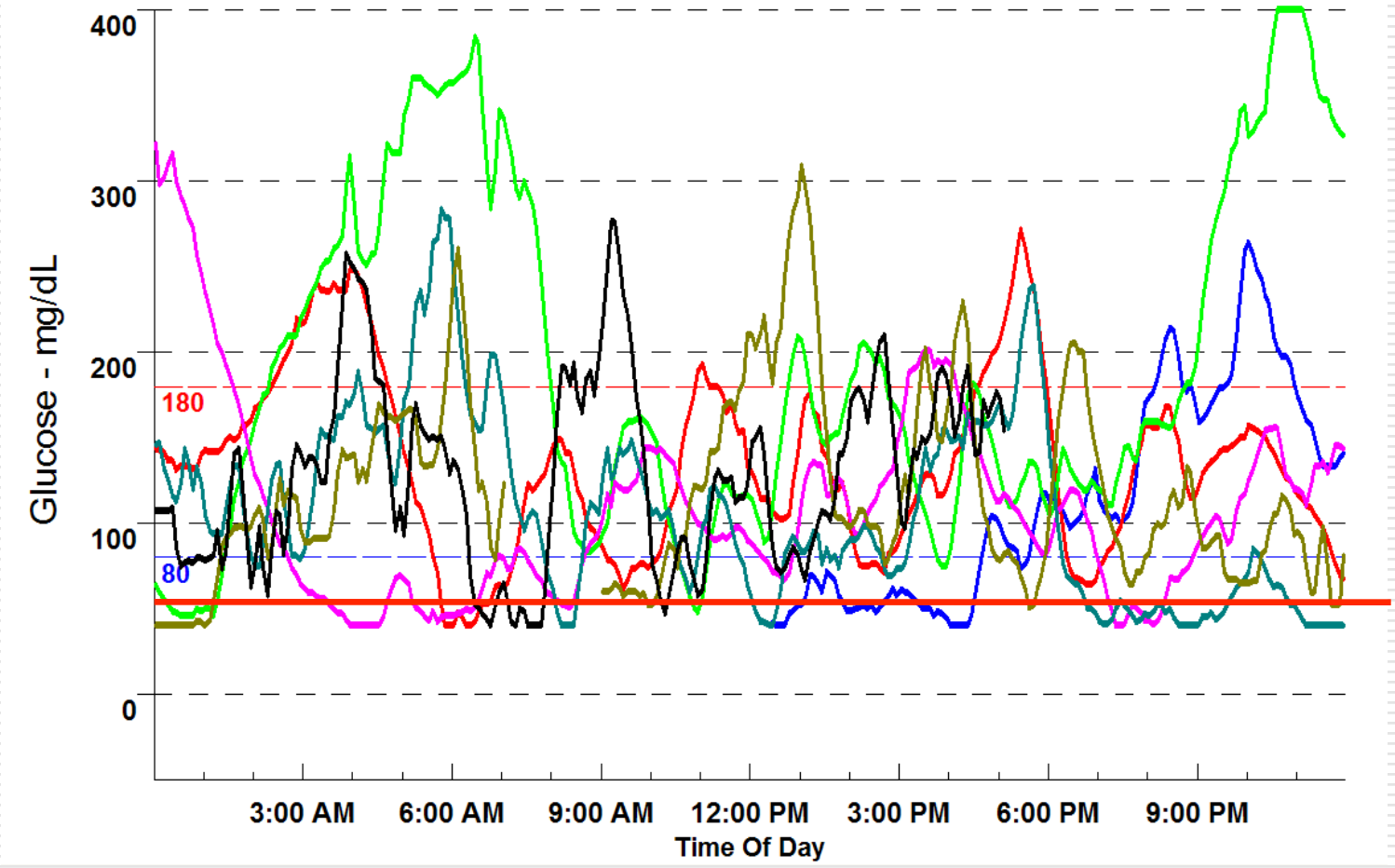
- Change infusion set type
- Or brand of insulin (rare)

CGMs For Better Control

CGM by Jackson Pollack

One Pollack painting sold for $140 million in 1996!

Make Your Own Jackson Pollack

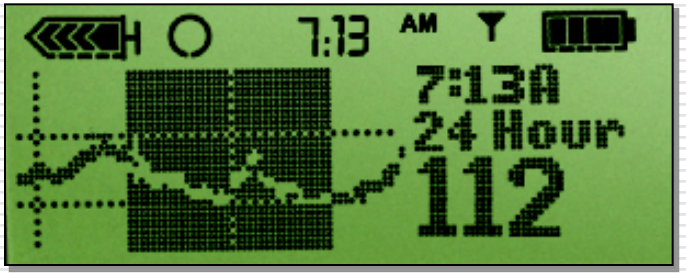


Only $1,000!

Revel® CGM Screens

On-Screen Reports

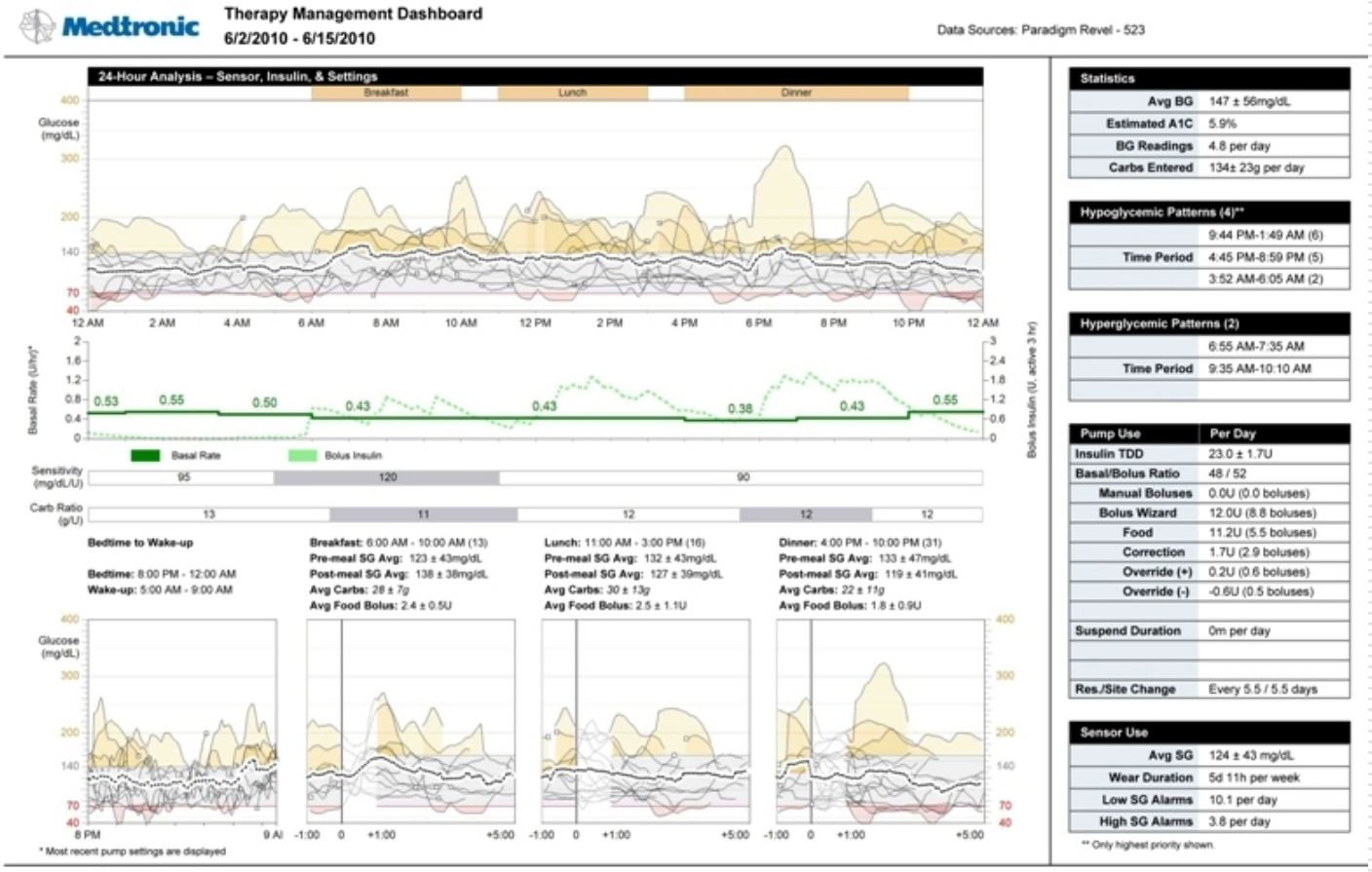
- 3 / 6 / 12 / 24-hr graphs
- Can scroll back for specific data points
- ↑↓ “direction” indicators
- Updates every 5 minutes
- Hi/Low Alerts
- Predictive Alerts



CareLink Online Reports

Sensor daily overlay

Sensor results by meal



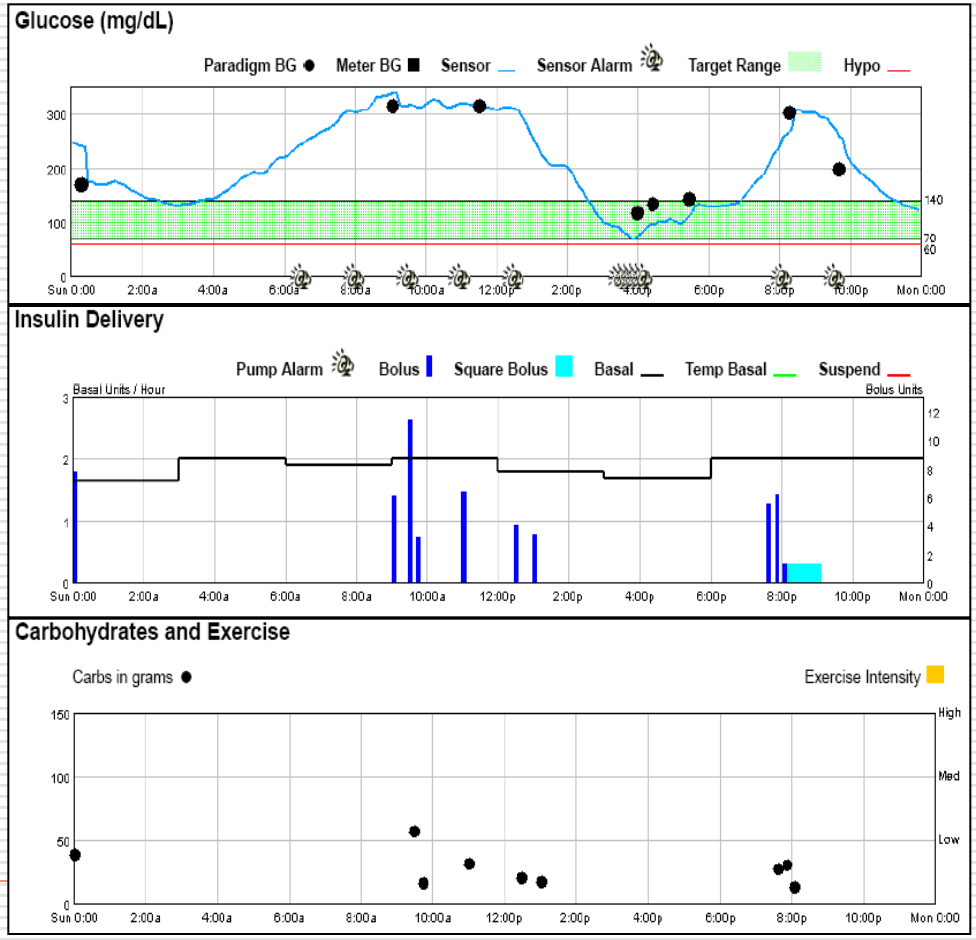
CareLink Online Reports

Daily summaries & layered reports

Sensor tracing

Basals & boluses

Carbs, exercise, etc



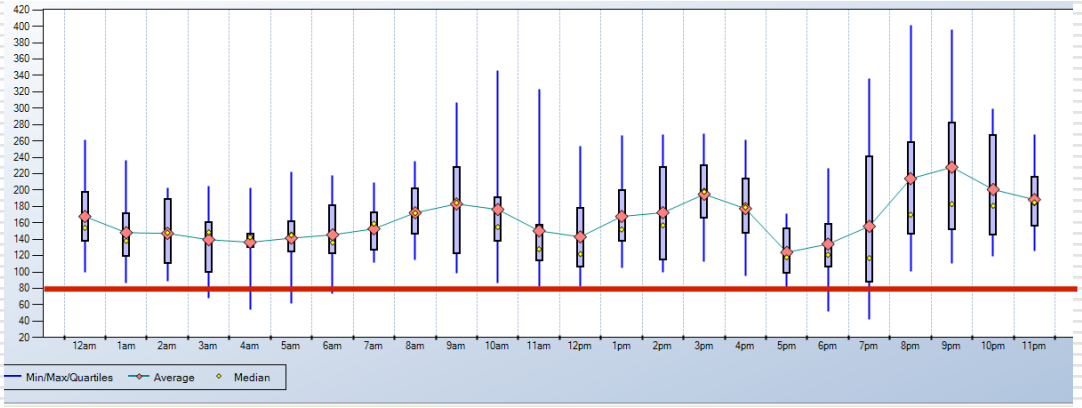
DexCom™ Seven Plus®

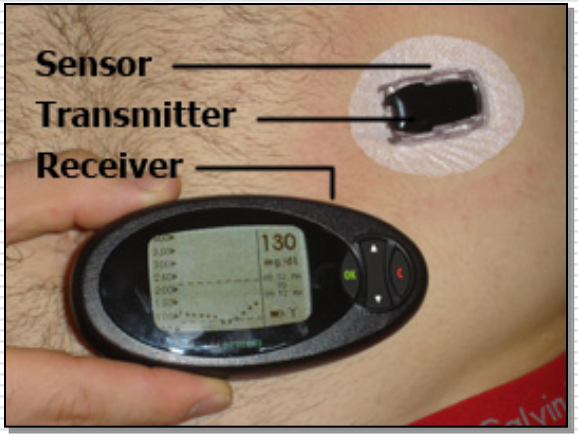
On-Screen Reports

- 1, 3, 6, 12, 24-hr graphs
- Updates every 5 minutes
- Hi/Low alerts
- Rate of Change alerts

DexCom™ 7 STS®

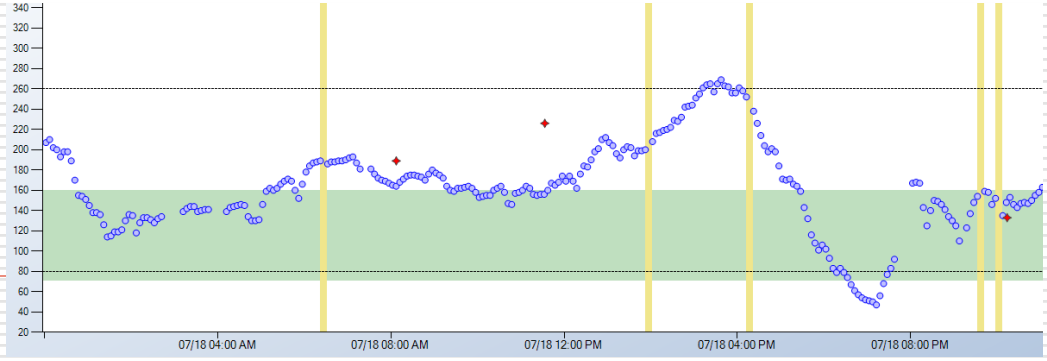
Dexcom DM2 Download Reports



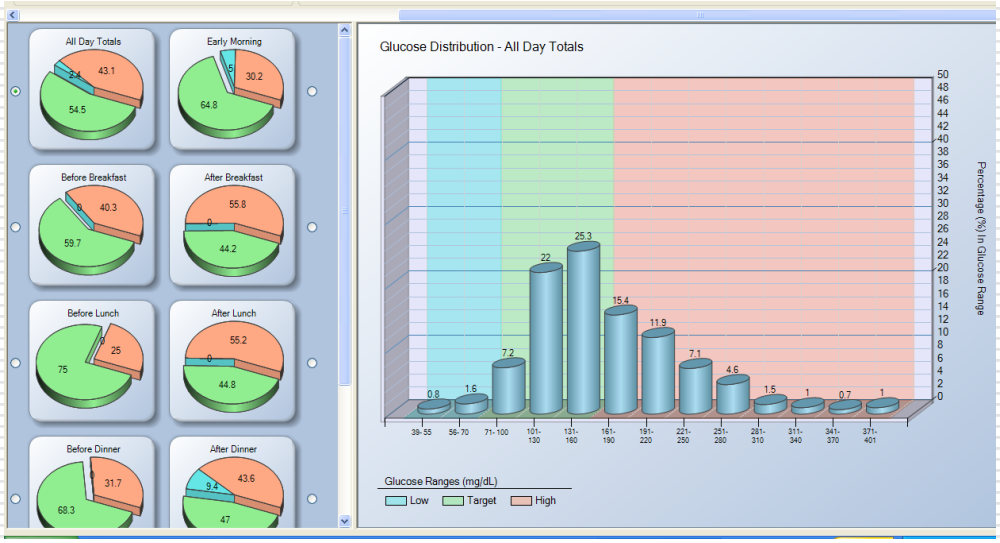


Hourly Stats

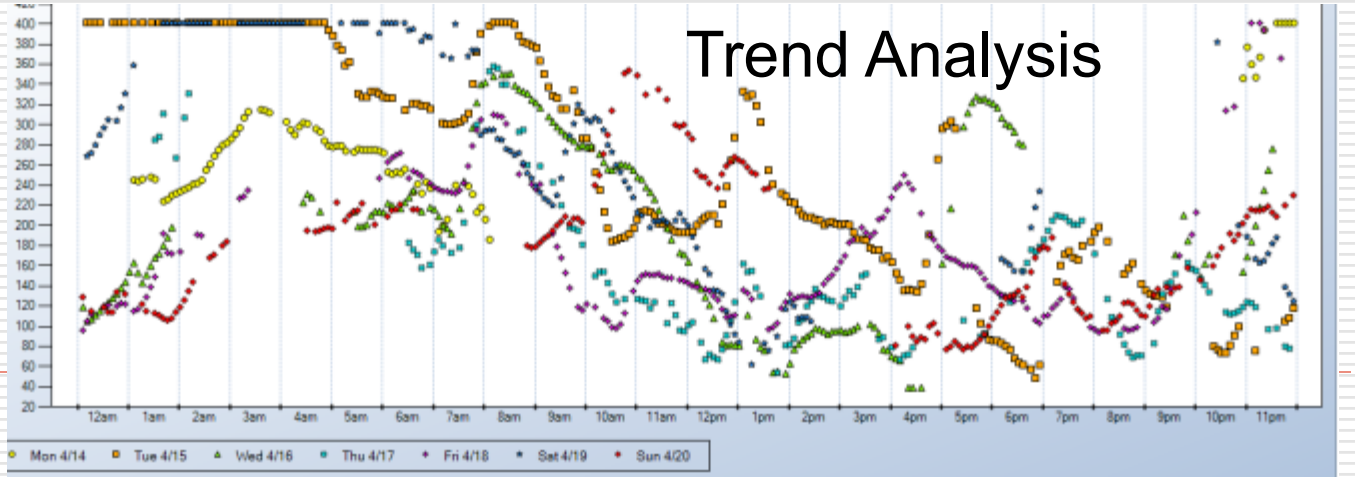
Glucose Trend



DexCom™ 7 STS®



BG Distribution



Trend Analysis

Alert Options

- Choose vibrate and/or beep
- Set high and low glucose threshold
- Set predictive alerts that you are likely to cross a high or low threshold (accurate up to ~20 min)
- Set rapid rise or fall – 1 to 3 mg/dl/min
- Balance your needs against “nuisance factor” – Lack of sleep may raise your glucose!

Where To Set CGM Alerts

LOW: **80 mg/dl**

Less than 80 – only for pregnancy

Higher for young children, high risk jobs

HIGH: **240 mg/dL** to start

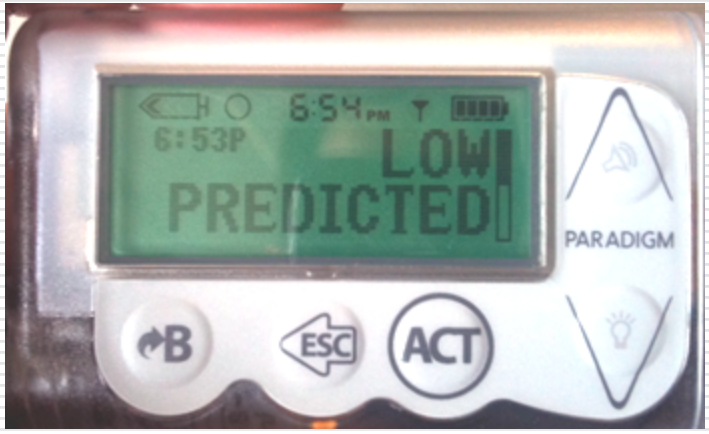
Gradually lower to 180 or less

The lower the high alert is, the earlier you get warned of rising BG

Adapted from: Hirsch, et al. Clinical Application of Emerging Sensor Technologies in Diabetes Management: Consensus Guidelines for CGM. Diabetes Technology & Therapeutics, 10:4, 2008, 232-244.

Trends And Predictions

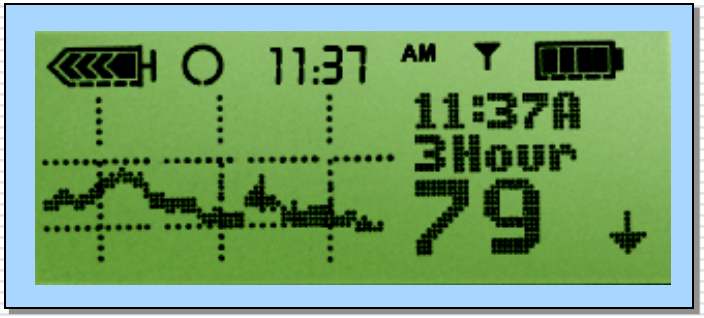
- Both help minimize highs and lows
- Good for:
  - Driving
  - Sports
  - Basal tests
  - Reducing uncertainty
  - Overriding bolus recommendations



Many thanks to Gary Scheiner, MS, CDE for help generating next 2 slides.

Can CGM Replace Fingersticks?

- Not right away – wait at least 12 hrs after new sensor is started
- Trust CGM only if it agrees with recent fingersticks
- Only if ongoing fingersticks are done to ensure accuracy



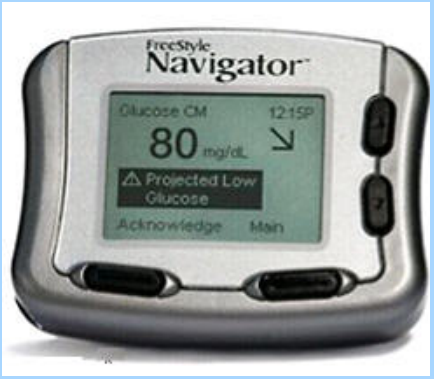
Hypoglycemia Alerts

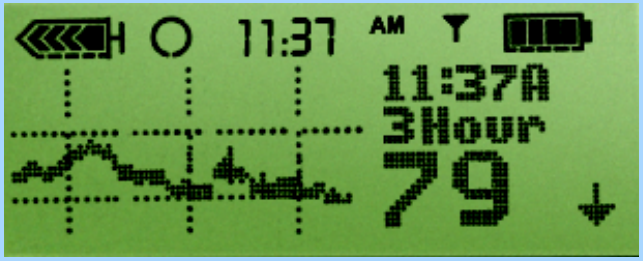
Predictive hypo alert or hypo alert & stabilizing: less treatment

- Less than usual carbs?
- Medium G.I. food

Hypo alert & dropping: aggressive treatment

- Full or increased carbs
- High G.I. food





Check BOB for exact guidance!

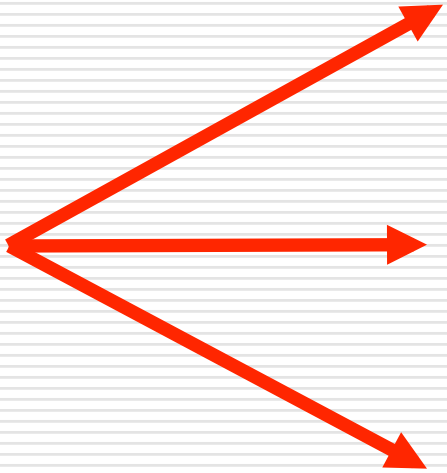
2, 3, & 6 Hr Trend Lines Show

- How different foods impact BG
- How boluses work
- After meal spiking
- Effects of exercise
- Impact of stress
- Nighttime lows

Analyze Last Bolus On CGM

Carbs + BG

High, low, or normal

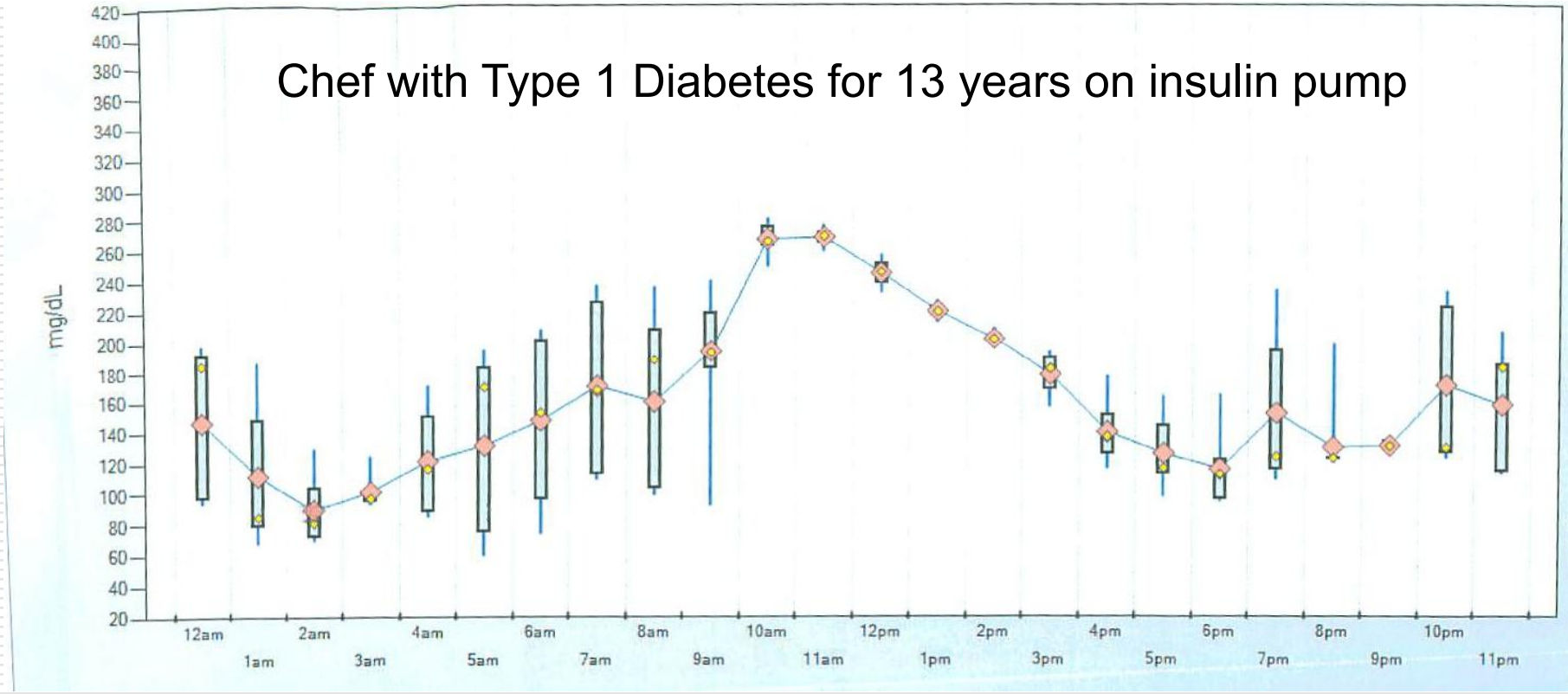


If BG 4-5 hrs later is:	**Insulin/Carbs in last 5 hrs:**
Too High	Bolus too low
In Target	Bolus in balance
Too Low	Bolus too low

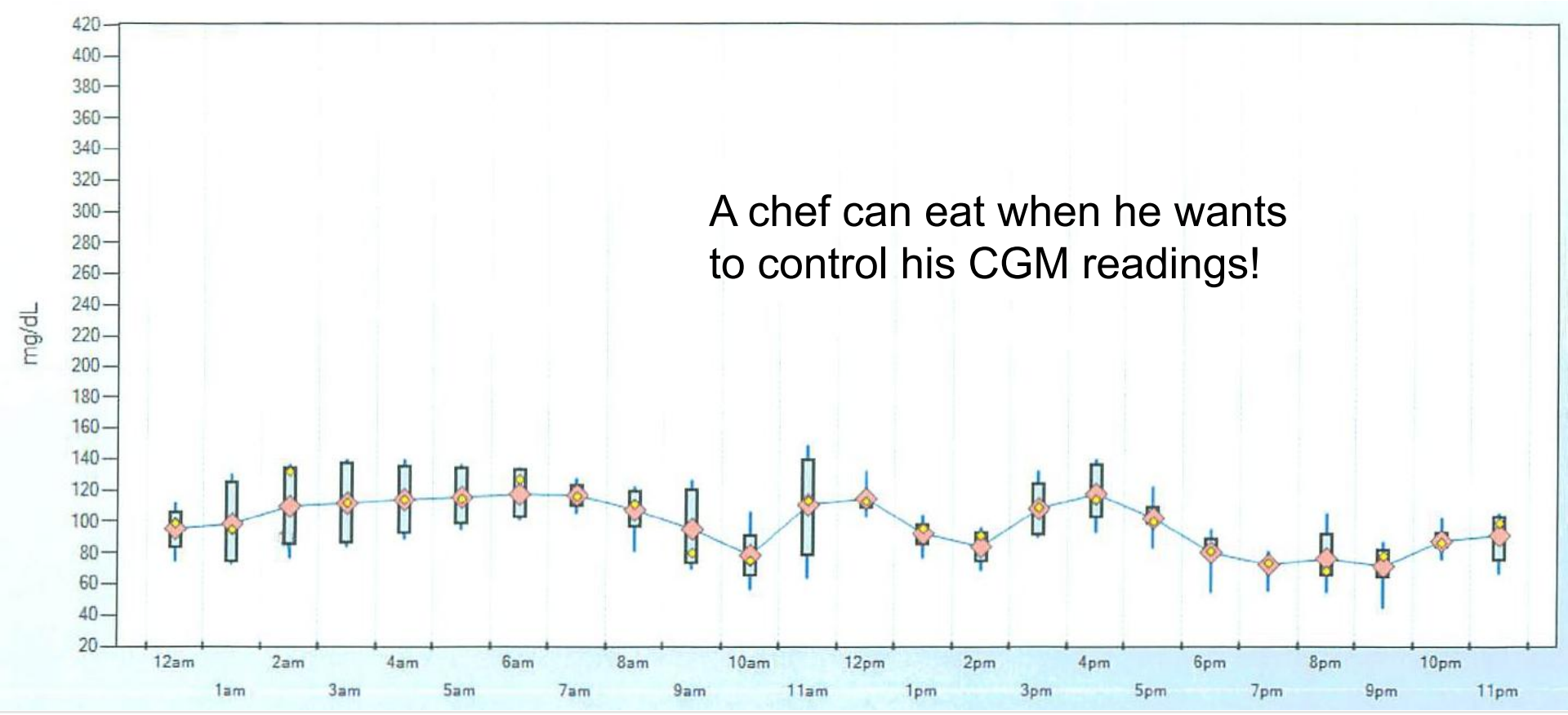
6, 12, & 24 Hr Trend Lines Show

- How to adjust basals
- Longer term impacts of exercise, stress, high-fat or protein foods
- Reveals overnight glucose patterns

CGM As Behavior Mod Tool: First Two Days On CGM



Chef's CGM Next Two Days



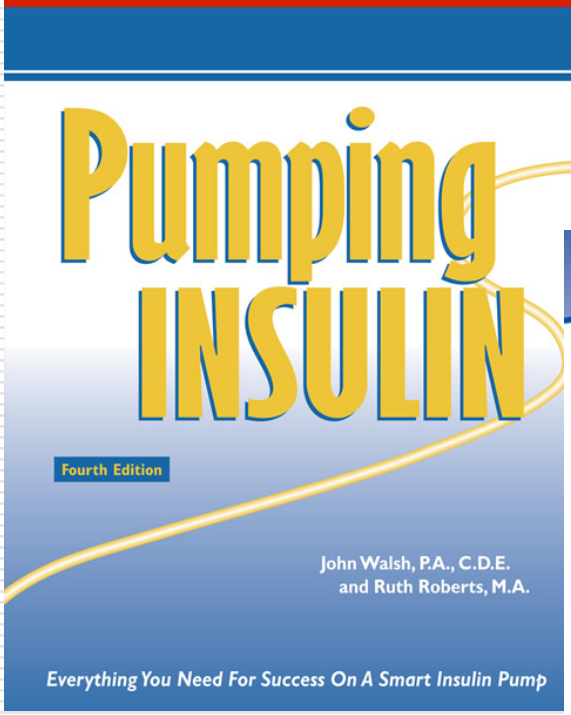
CGM Tips

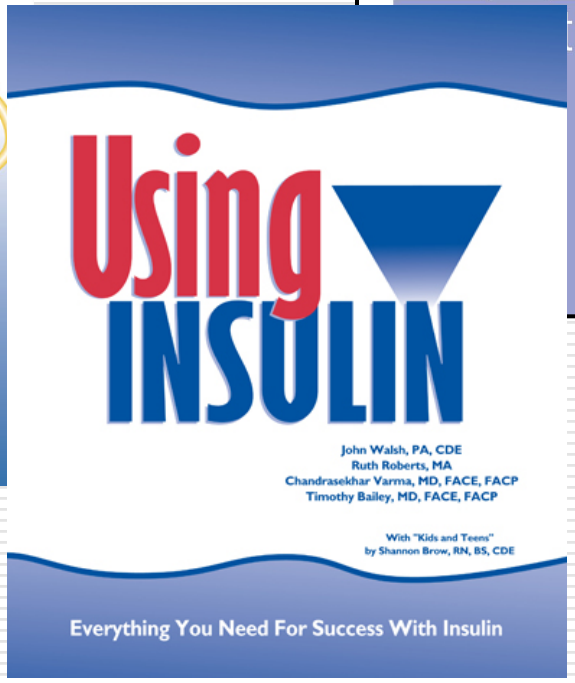
- Wear CGM at least 90% of the time
- Look at the monitor 10-20 times per day
- Don't go from BG to BG – Look for the big picture!
- Don't over-react to data – Avoid frequent between meal corrections until pattern is clear
- Take BOB into account
- Calibrate!
- Minimize "nuisance" alarms

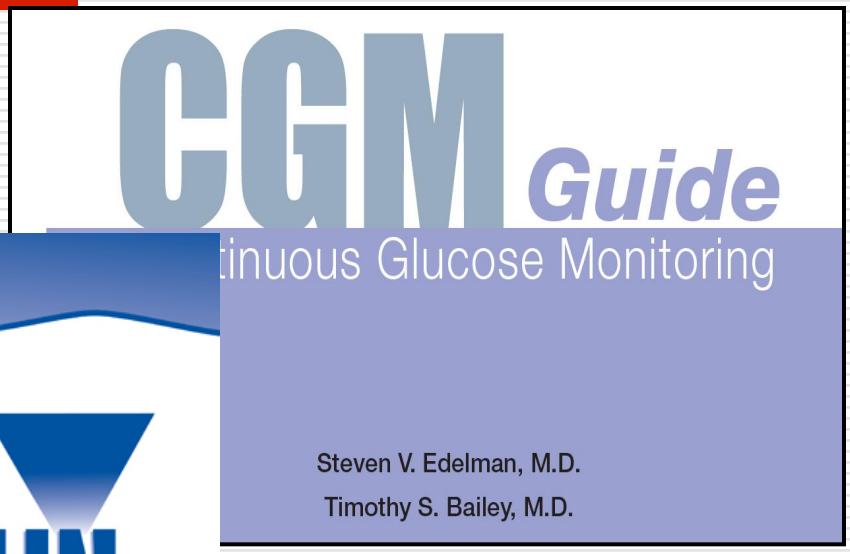
More CGM Tips

- Be patient and have realistic expectations
- Don’t panic if the meter and sensor numbers differ
- Look at trends not just individual values
- Rapid rises usually means more insulin needed, BUT check BOB first!
- Expect lag time, especially when BG is turning from down to up or from up to down
- No Tylenol with Dexcom

Reading – Still The Best Way To Learn







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